

March 4, 1873.

John Gould, Esq., F.R.S., V.P., in the Chair.

Mr. Edwin Ward sent for exhibition the original leg-bones of *Dinornis maximus*, described and figured by Professor Owen in the Society's 'Transactions' (vol. vi. p. 497, pls. lxxxix., xc.), belonging to Col. Michael.

The following papers were read :—

1. On the Spiders of St. Helena.

By the Rev. O. P. CAMBRIDGE, M.A., C.M.Z.S.

[Received February 1, 1873.]

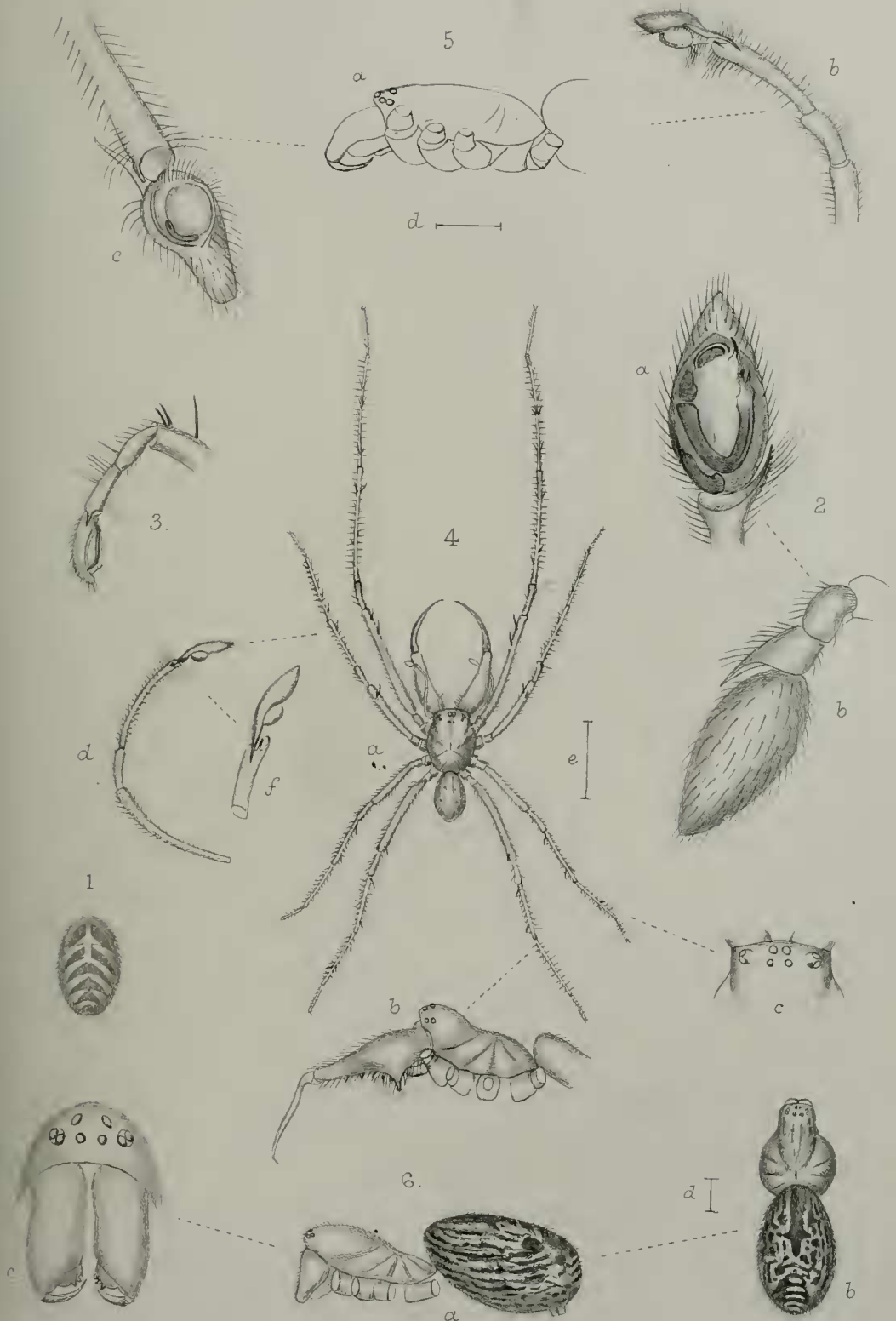
(Plate XXIV.)

In a former paper (Proc. Zool. Soc. 1869, pp. 531–544, pl. xlii.) twenty species of Spiders were recorded and described from a collection received from Mr. Melliss, by whom they were captured in the Island of St. Helena. Since then I have received from the same gentleman two other collections, in which, in addition to most of the species before recorded, I have found twenty-three others : among these, eleven appear to be undescribed, while, of the remainder, five are indigenous to Great Britain, *Segestria senoculata*, *Tegenaria civilis*, *Scytodes thoracica*, *Theridion tepidariorum*, and *Linyphia leprosa* ; two have been also received from Ceylon and India, *Pholcus distinctus* and *Artema convexa* ; two are European, *Argyrodes epeiræ* and *Xysticus grammicus* ; and two are Egyptian, *Latrodectus erebus* and *Tetragnatha pelusia*. The European stamp observed upon in regard to the Spiders of the former collection is thus equally marked in those now recorded and described, three only of those already described belonging to species not hitherto recorded as European.

According to the present and former papers, the known Spiders of St. Helena thus number forty species, a number which will, I doubt not, be greatly added to when a closer and more extended search shall have been made. I understand that Mr. Melliss has ceased to reside in St. Helena, so there is no more chance of further discoveries in Arachnida from his exertions ; but for what he has done, and so kindly placed within my reach as materials for the present and former papers, I desire now to return him my very heartiest thanks.

*List of species, including those recorded in the former paper marked by an *.*

<i>Filistata condita</i> , sp. n.	* <i>Segestria perfida</i> .
* <i>Dysdera crocata</i> , Koch = <i>D.</i>	— <i>senoculata</i> .
<i>rubicunda</i> of former paper.	<i>Gnaphosa lugubris</i> , sp. n.



O.P. Cambridge del.
A.T. Hollick lith.

Spiders of St. Helena.

W. West & Co. imp.

- **Clubiona dubia*, sp. n.
Cheiracanthium mellissii, sp. n.
 ——— *planum*, sp. n.
Amaurobius crucifer, sp. n.
Tegenaria civilis.
 ——— *proxima*, sp. n. (*T. atrica*
 of former paper).
Scytodes thoracica.
 **Pholcus phalangoides*.
 ——— *distinctus*.
Artema convexa.
 **Ariadne mellissii*, sp. n.
 **Theridion puniceum*.
 *—— *fulvolunulatum*.
 ——— *tepidariorum*.
Latrodectus erebus.
Linyphia leprosa.
 ——— *albimaculata*, sp. n.
 ——— *trifidens*, sp. n.
Argyrodes epeiræ.
Tetragnatha pelusia.
- **Meta digna*, sp. n. (includes
 also *Meta indigna* of former
 paper).
 **Epeira solers*?
 **Argiope aurelia*.
Uloborus williamsii.
Xysticus grammicus.
 **Philodromus signatus*, sp. n.
 **Heteropoda* (*Olios*) *tridentigera*, sp. n.
 **Pasithea pulchra*.
 **Lycosa ligata*, sp. n.
 *—— *inexorabilis*, sp. n.
 ——— *dolosa*, sp. n.
 **Salticus nigrolimbatus*, sp. n.
 *—— *adansonii*.
 ——— *inexcultus*, sp. n.
 ——— *subinstructus*, sp. n. (in-
 cludes also *Salticus illigeri*
 of former paper).

Fam. FILISTATIDES.

Genus FILISTATA.

FILISTATA CONDITA, sp. n. (Plate XXIV. fig. 1.)

Immature female, length $2\frac{1}{2}$ lines.

The whole of the fore part of this Spider is of a yellow colour.

The *cephalothorax*, which is of the ordinary form of the genus, has the upper part clothed pretty thickly with coarse and rather adpressed dark brown hairs, giving a darkish hue to that portion.

The *eyes* are rather large, but in the usual position, seated upon a strongish tuberculiform transverse oval eminence, a little way behind the fore margin of the clypeus.

The *legs* are moderately long and strong; they do not differ greatly in length; those of the fourth pair seemed to be slightly longer than those of the first, and the third pair rather the shortest; they are furnished with blackish-brown bristly hairs only, and each tarsus ends with three inconspicuous claws.

The *palpi* are strong, moderately long, similar to the legs in their armature, except that the single terminal claw is stronger than those on the tarsi of the legs.

The *falces* are short and weak, but rather projecting forwards.

The *maxillæ*, *labium*, and *sternum* present no observable variation from the usual generic type.

The *abdomen* is oval, rounded and bluff behind, where it projects considerably over the site of the spinners; it is of a dull whitish drab-yellow colour, clothed sparingly with coarsish brown hairs, and marked on the hinder half of the upperside with a series of four or five strong and well-defined transverse angulated bars or chevrons of

a dull rusty reddish colour, the apex of each one (except the foremost) running into the one before it. These bars span the whole width of the upperside of the abdomen, being stronger at the angles than at the extremities. The spinners, six in number, are very short and inconspicuous.

A single female, not yet adult, was contained in Mr. Melliss's collection. The pattern on the abdomen distinguishes it at once from any recorded species known to me.

Fam. DYSDERIDES.

Genus DYSDERA.

DYSDERA CROCOTA.

Dysdera crocota, C. Koch, Die Arachn. Bd. v. p. 81, tab. 166. figs. 392-394.

Dysdera rubicunda, Bl. Spid. Great Brit. & Ir. p. 371, pl. 28. fig. 267; Cambr. P. Z. S. 1869, p. 532 (non *D. rubicunda*, Koch).

Dr. Koch has lately sent me typical examples of *Dysdera rubicunda* (Koch) and *D. crocota* (Koch), from which it appears that *D. rubicunda* (Koch) is quite distinct from the Spider so recorded by Mr. Blackwall, the latter being the same as *D. crocota* (Koch).

Examples of both sexes of *D. crocota* were received from Mr. Melliss in his recent collections, as well as in the former one.

Genus SEGESTRIA.

SEGESTRIA SENOCULATA.

Segestria senoculata, Walck. Ins. Apt. vol. i. p. 268.

Immature examples of what I believe to be this species were found among the St.-Helena Spiders received from Mr. Melliss.

Fam. DRASSIDES.

Genus GNAPHOSA (Latr.).

GNAPHOSA LUGUBRIS, sp. n. (Plate XXIV. fig. 2.)

Adult male, length $2\frac{1}{4}$ lines.

Cephalothorax oval, depressed, and almost devoid of any lateral constriction forwards, the normal grooves and indentations being nearly obsolete; it is of a deep blackish-brown colour, thinly clothed with pale adpressed hairs.

The *eyes*, looked at from above and behind, are in two transverse nearly parallel rows; the hind centrals are further from each other than each is from the hind lateral on its side, while those of the foremost row appeared to be as nearly as possible equidistant from each other. The height of the clypeus is equal to half that of the facial space; all the eyes (except those of the fore central pair, which are dark-coloured) are of a dull amber-colour.

The *legs* are rather long, moderately strong; their relative length seemed to be 4, 1, 2, 3; they are more or less of a dark greenish black-brown hue, except the tarsi and metatarsi (of the fourth pair

the tarsi only), which are pale-coloured; they are furnished with hairs of various lengths, and a few spines, chiefly on the tibiae and metatarsi of the two hinder pairs.

The *palpi* are short and not very strong: the radial and cubital joints are very nearly of equal length; perhaps the former is slightly the shortest, and has its outer extremity continued in a tapering apophysis, whose extreme point is slightly obtuse and of a deep brown colour, the rest being of a greenish-brown hue; the length of this apophysis is rather less than that of the joint itself. The digital joint is rather large, of an oval form, exceeding in length that of the radial and cubital joints together; the palpal organs are neither very prominent nor complex, consisting of several corneous processes, of a red-brown and whitish colour.

The *falces* are moderately long and strong, projecting forwards, and a little prominent near the base in front.

The *maxillae*, *labium*, and *sternum* are of the normal character, and (with the *falces*) are of a dark yellowish-brown colour.

The *abdomen* is of a narrow, oblong-oval form; it is of a black colour, with a somewhat silky bottle-greenish reflection in some positions. It is well clothed with hairs; and there are four indistinct pale dots, forming nearly a square, near the middle of the upper-side. The spinners are rather long and prominent, those of the inferior pair being the longest and strongest; they are of a blackish colour, tipped with whitish. The spiracular plates are large and of a dull yellowish-brown colour.

A single adult male was comprised in Mr. Melliss's collection from St. Helena.

Genus CLUBIONA.

CLUBIONA DUBIA. (Plate XXIV. fig. 3.)

Clubiona dubia, Cambr. Spid. St. Helena, Proc. Zool. Soc., Nov. 1869, p. 532.

In the former collections received from Mr. Melliss the female only of this Spider was found; in the last collection there were several males and several females also. In size, colours, and general characters the sexes are similar; but the *falces* of the male are longer, and each has a strong conically formed sharp tooth on the under edge of its inner side, near the extremity.

The *palpi* are moderately long and not very strong. The humeral joint has three distinct and nearly erect black spines near its fore extremity on the upperside, two near together in a transverse line, the third, which is the longest, is a little way behind them. The radial and cubital joints are of equal length; the former has a small, pointed, tapering, dark red-brown, somewhat tooth-like, corneous-looking apophysis in continuation of its outer extremity, and four or five longish, bristly, prominent hairs on its inner side; the digital joint is small and of an oval form, not much, if at all, exceeding in length that of the radial joint. The palpal organs are neither very prominent nor complex; a longitudinally placed corneous process on their outer side has a deep, red-brown, shining margin,

near the fore extremity of which, on the inner side, there are one or two small, red-brown, corneous prominences.

An elongate portion of the epidermis on the fore part of the upperside of the abdomen has a smooth and somewhat corneous appearance, and is rather darker-coloured than the rest.

Several examples of this species, which is allied to *C. lutescens* (Westr.), but quite distinct, were contained in the collection last received from Mr. Melliss.

Genus CHEIRACANTHIUM.

CHEIRACANTHIUM MELLISSII, sp. n. (Plate XXIV. fig. 4.)

Adult male, length (exclusive of the falces) 5 lines.

The *cephalothorax* of this fine and striking species is broad oval, rather roundly truncated before, constricted laterally near the fore margin, and moderately convex above; the normal grooves and indentations are not very strongly marked. Its colour (as well as that of the falces, maxillæ, and sternum) is orange-yellow, glossy; and it appeared to be wholly destitute of hairs. The width of the fore margin equals half the length of the cephalothorax.

The *eyes* (eight in number, rather small, and not very unequal in size) are in three groups, rather widely separated from each other; the central one, of four eyes, forms a trapezoid, whose fore side is a little the shortest, and its transverse diameter shorter than the longitudinal; the foremost pair of these eyes, which are the largest of the eight, are separated from each other by about an eye's diameter; those of each lateral pair are placed obliquely, and not quite contiguously to each other on a tubercle.

The *legs* are long, moderately strong; their relative length is 1, 4, 2, 3, those of the first pair being greatly the longest. They are of a yellow colour, furnished with hairs, some of which are very slender and erect, also with a few, not very strong, black spines. Each tarsus ends with two claws and a black claw-tuft.

The *palpi* are rather long, slender, and similar in colour to the legs; the length of the humeral joint, which is considerably bent, is equal to that of the cubital and radial joints together, the latter being nearly three times the length of the cubital, and slightly curved; it has a small, fine, sharp-pointed, red-brown apophysis at its outer fore extremity. The digital joint is small and narrow, being of the same length as the cubital, which it does not exceed in breadth, and its base on the outer side is continued backwards in a sharp-pointed spur, of no great length and running just above the radial apophysis; the palpal organs are small and simple, consisting of a somewhat circular lobe with a small, pale, curved spine in connexion with its upper surface.

The *falces* are of great size and divergent, of a somewhat bent form, and enlarged on the outer sides near the base, as well as prominent underneath in an angular form; at the angle is a strong tooth, followed forwards by a longitudinal series of five other teeth of less size; along the lower margin by these teeth is a fringe of coarsish black hairs: the length of the falces equals that of the

cephalothorax ; and the fangs, which are also equal to the falces in length, are strong, sharp-pointed, of a deep-black chestnut-brown colour, tolerably straight in the middle, but bent at both ends ; a constriction towards their extremity gives them at first sight the appearance of being articulated at that point.

The *maxillæ* are of the normal form, and are thickly furnished with strong black hairs on their inner margins (next to the falces).

The *labium* is broadish oblong in form, strongly emarginate at the apex, and does not much exceed in length half that of the *maxillæ* ; its colour is a dark chestnut-brown.

The *abdomen* is short-oval, and projects over the base of the cephalothorax ; it is of a dull yellow colour, very sparingly clothed with short fine hairs, and marked on its upperside, near the middle, with four impressed dots of a rusty hue, forming a square, whose fore side is the shortest.

A single example of this exceedingly fine and distinct *Cheiracanthium* was contained in Mr. Melliss's St.-Helena collection ; and I have great pleasure in connecting with it the name of that gentleman. By the size of the falces it is allied to *C. italicum* (Canestrini and Pavesi, Atti della Soc. Ital. di Scienze Nat. xi. fasc. 3, 1848, p. 114, separate copy ? ; also Arch. p. Zool. Genova, ser. 2, vol. iii. tab. 4. fig. 3) ; but it may be distinguished at a glance by the remarkable difference in the character and relative proportion of the palpal joints, as well as by the greater length of the legs of the first pair of the present species, and the less size of the Spider itself.

CHEIRACANTHIUM PLANUM, sp. n. (Plate XXIV. fig. 5.)

Adult male, length 4 lines.

The *cephalothorax* of this species is of a rather broad oval, only slightly constricted laterally in front, and flattened above, its upper convexity being very slight, and at the fore part it is somewhat squarely truncated ; it is of a yellow colour, slightly suffused in front with pale reddish brown ; the space enclosed by the four central eyes is dusky blackish ; and from them an indistinct suffused line of the same runs back along the middle, disappearing on the hinder slope.

The *eyes* are in two rows, and occupy a broad transverse, but very narrow longitudinal area, the fore lateral eyes (when looked at from the front) being very nearly as wide apart as the width of the two falces ; the clypeus is obsolete, owing to the fore central eyes being placed immediately upon the fore marginal line of the caput. The eyes are small, and do not differ much in size ; those of the fore central pair are rather more than an eye's diameter distant from each other, and each is considerably further removed from the fore lateral eye on its side ; those of the hind central pair are further from each other than those of the fore central pair, the four central eyes forming a square whose fore side is the shortest ; and the space which separates the central eyes is less than that which separates each from the hind lateral on its side, in about the same proportion as above mentioned in regard to the eyes of the foremost row ; those

of each lateral pair are nearly contiguous to each other, and seated on a tubercle.

The *legs* are long and rather slender; their colour is yellow, and they are furnished with hairs, long, slender, erect bristles, and a few not very long black spines; their relative length is 1, 4, 2, 3, those of the first pair being greatly the longest; each tarsus ends with two curved black claws and a small scopula or claw-tuft of hairs.

The *palpi* are similar in colour to the legs, slender, moderately long, and furnished with hairs and bristles; the humeral joint is curved, and is equal in length to that of the cubital and radial together; the radial joint is double (if not rather more than double) the length of the cubital, and has on its outer extremity a very small, rather bent, dark reddish-brown apophysis; this apophysis is slightly cleft at its extremity. The digital joint is short, of an oval form, and does not exceed in length half that of the radial joint; at its hinder extremity on the outer side it is continued in the form of a rather tapering, sharp-pointed, nearly straight spur, which runs just above the radial apophysis, and is about half the length of the joint itself. The palpal organs are neither complex nor highly developed; they are of a somewhat flattened globular form, with an exceedingly slender, filiform black spine in contact with their inner margin.

The *falces* are similar in colour to the cephalothorax; they are very strong, projecting, and prominent near their middle in front, but not divergent.

The *maxillæ* are of normal form; and their colour, with that of the sternum, is yellow.

The *labium* is oblong, emarginate at the apex, and of a blackish-brown suffused colour.

The *abdomen* is of moderate size and oval form; its colour is a dull luteous yellow, sparingly clothed with silky yellow hairs, and thinly covered on the sides and upperside with whitish-yellow cretaceous spots or small patches, many of them being nearly conterminous, and leaving a clear short sword-shaped or slightly cruciform marking on the fore part of the upperside.

A single adult male of this species was contained in Mr. Melliss's St-Helena collection.

Fam. AGELENIDES.

Genus AMAUROBIUS.

AMAUROBIUS CRUCIFER, sp. n. (Plate XXIV. fig. 6.)

Adult female, length 2 lines.

The *cephalothorax*, when looked at from above, has more the look of that of Spiders of the genus *Agelena* than the typical *Amaurobius*; it is rounded behind and strongly constricted laterally forwards, the caput being produced or as it were drawn out. It is of a pale yellow-brown colour, thinly clothed with hairs; and the normal grooves and indentations are marked with convergent black-brownish lines and suffusions; the lateral margins are also of the same colour.

The *eyes* are in two transverse rows on the fore part of the caput,

the height of the clypeus being very nearly half that of the facial space; the hinder row, which is the longest (looked at from in front), is strongly curved, the front one nearly straight. The eyes are not very unequal in size, the fore laterals being slightly the largest; the intervals between the eyes of each row respectively are as nearly as possible equal; the four central eyes form a trapezoid whose fore side is shorter than its hinder one, and the length of its sides intermediate between them.

The *legs* are not very long nor very unequal in length, but moderately strong; their relative length is 1, 4, 2, 3, those of the fourth and second pairs being very nearly equal; they are of a pale brownish-yellow colour, broadly annulated with darker brown; they are furnished with hairs, and each tarsus ends with three claws; there is also a calamistrum on the metatarsi of the fourth pair, situated rather on the inner side behind.

The *falces* are long and strong; each has a small flattish enlargement on the inner side near the extremity, armed with three small sharp teeth; this enlargement is apparently formed by the excavation of the upperside of the falces at that part.

The *maxillæ* are long, strong, obliquely and roundly truncated at their extremities on the outer side, and slightly inclined towards the *labium*, which is about half the length of the maxillæ, of an oblong form, and rather broader at its base than at its apex, where it is somewhat rounded. The *falces* are similar in colour to the cephalothorax; the maxillæ are similar to the legs and palpi; the labium is suffused with blackish brown, and the *sternum*, which is of a heart-shaped oval form, is slightly suffused with brown.

The *abdomen* is oval, rounded, and rather bluff behind; the ground-colour is a pale luteous yellow, and it is more or less irregularly marked all over with black streaks and markings; among those on the upperside, near the middle, is a fairly defined cruciform marking, followed towards the spinners, in a longitudinal series, by several rather short, blunt-angular, transverse, black stripes. In front of the ordinary spinners is a broad transverse supernumerary one.

Two adult females were contained in Mr. Melliss's St.-Helena collection.

Genus TEGENARIA.

TEGENARIA CIVILIS.

Tegenaria civilis, Bl. Spid. Great Brit. & Ir. p. 166, pl. 12. fig. 107.

Adults of both sexes were contained in the collection last received from Mr. Melliss; St. Helena is thus another locality ascertained for this cosmopolitan species.

TEGENARIA PROXIMA, sp. n.

Tegenaria atrica, Cambr. Spiders of St. Helena, P. Z. S. 1869, p. 533.

Adult male, length 3 lines.

In size, colours, and markings this species nearly resembles

T. civilis (Walck.). The markings, however, on the cephalothorax and sternum, as well as the annulation of the legs, are more distinct, and perhaps bear a rather nearer approach, both upon these parts and also on the abdomen, to *T. atrica* (Koch), from which the small size of the present species, independently of other characters, at once distinguishes it. The femora of the first pair of legs are also less suffused with dark reddish brown than in *T. civilis*; but in the *palpi* are perhaps contained the best distinguishing characters. The cubital and radial joints in both species bear the same (or very nearly the same) relative length to each other, the latter being rather longer than the former, enlarging on the outer side towards its extremity, where, as in *T. civilis*, there is a small red-brown corneous-looking apophysis; but in that species this apophysis is broadish and obliquely truncated at its extremity, while in the present species it is less strong, tapering and pointed at its extremity; the digital joint is also larger; and the palpal organs, although bearing the same general form and structure, are perceptibly different in their development; from their centre (connected with a strong corneous process) there issues a filiform spine, which, curving backwards and with a bold sweep round their inner margin, continues in a thread-like form quite round their extremity, ending on or close to their outer margin: an analogous spine exists in *T. civilis*; but in that species it is much shorter and stronger, with a closer and far smaller sweep, and its point is not drawn out into a thread-like form. Several other processes analogous to each other are connected with the palpal organs of the two species; but in the present they are, although longer and more prominent, yet proportionally not quite so strong.

A single adult male was contained in Mr. Melliss's St.-Helena collection now under consideration. I feel no doubt that the example contained in a former collection, and recorded (*l. c.*, *suprà*) as *T. atrica*, is of the same species as the present, though that example had not attained maturity.

It is possible that this may be the *T. testacea*, Sim. (Aranéides nouveaux ou peu connus du midi de l'Europe, 1870, p. 10), found at Granada, in Spain; it agrees with that species in the form of the digital joint and the radial apophysis as described by M. Simon; but I am inclined to think it is distinct.

Fam. SCYTODIDES.

Genus SCYTODES.

SCYTODES THORACICA.

Scytodes thoracica, Walck. Ins. Apt. i. p. 270.

An adult female was contained in Mr. Melliss's St.-Helena collection last received.

Fam. PHOLCIDES.

Genus PHOLCUS.

PHOLCUS DISTINCTUS.

Pholcus distinctus, Cambr. Linn. Soc. Journ. vol. x. p. 380, pl. xi. figs. 28-30.

Females of this species were received from Mr. Melliss from St. Helena.

Genus ARTEMA.

ARTEMA CONVEXA.

Artema convexa, Bl. Ann. Nat. Hist., Nov. 1858.

Females of this Spider (which is nearly allied to if not identical with *Pholcus borbonicus*, Vins.) were found in the St.-Helena collection.

Fam. THERIDIIDES.

Genus THERIDION.

THERIDION TEPIDARIORUM.

Theridion tepidariorum, Koch, Die Arachn. Bd. viii. p. 75, tab. 273. fig. 646, and tab. 274. figs. 647, 648.

Examples of this widely dispersed species were contained in the St.-Helena collections. I have received it also from Brazil, as well as from Ceylon.

Genus LATRODECTUS.

LATRODECTUS EREBUS.

Latrodectus erebus, Sav. Arachn. de l'Egypte, pl. 3. fig. 9.

The St.-Helena collections contained an example of this Spider.

Genus LINYPHIA.

LINYPHIA LEPROSA.

Linyphia leprosa, Ohl. Die Araneiden der Provinz Preussen, p. 47.

L. confusa, Cambr. Trans. Linn. Soc. xxvii. p. 429, pl. 55. no. 21, a, b, c, d, f, g.

Examples of both sexes were found in the St.-Helena collections.

LINYPHIA ALBIMACULATA, sp. n.

Immature female, length nearly 2 lines.

Although not quite adult, yet the very distinct markings and colours of this Spider leave me no doubt whatever about its being (as far as I am aware) undescribed. In form and structure there is no marked departure from the ordinary generic type; the sides of the thoracic portion of the cephalothorax are deep black-brown, the margins being yellowish; the caput is yellow; a continuation of this colour, in a tapering or wedge-shaped form, runs backwards from the occiput to the hinder slope of the thorax; and a deep blackish-brown band runs back from the hind central eyes, tapering to a point at the central indentation where the thoracic segments converge. The clypeus has two brownish maculæ near its lower margin, one on either side of the central point: the height of the clypeus equals half that of the facial space; it is a little impressed transversely immediately below the eyes, from the slight prominence of the ocular area. The eyes are in the ordinary position, on greyish-black tubercular spots, and not very unequal in size; those of the hinder row are not quite equally separated, the centrals being further from

each other than each is from the lateral on its side ; those of each lateral pair are bright pearly white, placed a little obliquely, contiguous to each other, and the largest of the eight ; those of the fore central pair are the smallest, and nearly, if not quite, contiguous to each other.

The *legs* are rather strong, but not very long ; their relative length is 1, 2, 4, 3 ; they are of a clear pale yellow colour, distinctly banded with dark brown and furnished sparingly with hairs and about the usual number of longish black spines.

The *palpi* are similar in colour and markings to the legs ; and from the fore extremity on the upperside of each of the cubital and radial joints is a long, strong, black, slightly curved, tapering bristle ; several smaller ones are also on the digital joint.

The *falces* are long, rather slender, slightly diverging, and similar to the legs in colour.

The *maxillæ*, *labium*, and *sternum* are dark-coloured, the two former being the lightest.

The *abdomen* is of ordinary form, very convex above and projecting over the base of the cephalothorax ; the ground-colour is of a dark leadenish hue, marked with black patches and markings, the sides and upper surface being pretty thickly and rather symmetrically covered with bright white cretaceous spots ; some of these form slightly oblique lines on the hinder part of the sides, and others a sort of horizontal cincture on either side of the fore half ; others, again, form a broken horizontal band along the lower part of each side. The general character and disposition of the abdominal markings bear a near resemblance to that of *L. leprosa* (Ohl.) ; but the markings and colours of the cephalothorax distinguish it from that species at a glance, as well as the distinctly annulated legs.

A single example was contained in the St.-Helena collection last received from Mr. Melliss.

LINYPHIA TRIFIDIDENS, sp. n.

Adult male, length 3 lines.

This very distinct Spider has the cephalothorax of ordinary form, but rather flattened, and, looked at in profile, it presents a straight line rising gradually from the hinder slope (which is itself very gradual) to the eyes ; its colour is yellow ; a broad, dark brown, well-defined band runs along each side, converging and almost uniting at the hinder slope, and generally meeting in front above the falces ; this band leaves a rather narrow, but distinct, lateral marginal stripe on each side : along the centre of the cephalothorax a tapering dark-brown band runs back from the eyes to the hinder slope, where it ends in a point, and where the junction of the caput and thorax are marked by a strong longitudinal depression.

The *eyes* are similar in their relative size and position to those of *L. albimaculata* : the clypeus is slightly impressed immediately below the eyes, and rather prominent thence to the lower margin ; its height exceeds half that of the facial space.

The *legs* are long, tolerably strong ; and their relative length is

1, 2, 4, 3; their colour is yellow, distinctly banded with dark yellow-brown, and furnished sparingly with hairs and a few, neither very long nor strong, black spines.

The *palpi* are short and not very strong. The radial joint is double the length of the cubital, and of a clavate form, rather more produced at its extremity on the upper than on the lower side; at the outer extremity a little in front is a long, curved, strong, tapering, black bristle, directed forwards and nearly in connexion with a group of a few less conspicuous bristly hairs. The cubital joint also has a tapering black bristle at the fore extremity of the upperside, but it is not nearly so strong a one as that on the radial joint; the digital joint is small but of the same length as the radial, and of a tapering, pointed oval form. The palpal organs are well developed, rather complex, with various corneous processes and prominently turned outwards; one small, red-brown, rather flattened but abruptly pointed process, separate from the general mass, appears to issue from the radial joint nearly beneath the bristle and group of hairs above mentioned. The palpi are similar in colour and markings to the legs.

The *falces* are of a dark yellow-brown colour, rather long, strong, divergent at their extremities, and convexly prominent and massive towards their base in front: on the inner margin of the lower side at the extremity of each is a row of short teeth; and also towards the extremity of the inner margin of the upperside is a strong tooth-like prominence, divided into three small points at its extremity; two of these points are stronger than the other, and from some points of view are the only ones visible, the third being placed beneath and a little below the others; following this tooth-like prominence in an oblique direction downwards are several small bluntish teeth of different sizes. The fangs are strong, and somewhat incrassated towards their articulation with the falces.

The *maxillæ* are rather long and strong, not inclined to the labium, and rather broadest at their extremities, where they are slightly rounded on the outer sides.

The *labium* is short, broad, and semicircular, and with the *maxillæ* of a dark yellowish-brown colour.

The *abdomen* is oval, not very convex above, nor much projecting over the base of the cephalothorax; it is marked with black markings and white cretaceous spots on a dull whitey-brown ground; the pattern is indistinct, but some angular bars or chevrons (running into blotches at their extremities) are visible on the hinder half of the upperside; the sides have a large black patch forwards, followed behind by several slightly oblique black bars more or less distinct; along the underside runs a broad black-brown band, occupying nearly the whole of it.

The *female* is larger than the male, to which it is similar in colour and markings, but differs in wanting the large trifold and other teeth on the front of the falces, having only one row along the inner margin of the lower side; these, however, are more numerous, longer, stronger, and sharper than the corresponding teeth in the

male; in other respects the falces are like those of that sex, though a little less strong.

In colours and markings this species is very like *L. albipunctata*; but the less-convex abdomen, with the massiveness and prominence of the falces, and, especially in the male, the trifid tooth-like prominence in front of them, distinguish it at a glance both from that species and any other of the genus known to me.

L. trifididens shows a decided approach to Spiders of the genera *Pachygnatha* and *Meta*; and it is not without some hesitation that I have (in absence of any knowledge of its habits) placed it in the genus *Linyphia*.

Three males (two adult) and an adult female were comprised in the St.-Helena collection received from Mr. Melliss.

Genus ARGYRODES.

ARGYRODES EPEÏRÆ.

Argyroides epeïræ, Sim. An. Soc. Ent. Fr. 4^e sér. tom. vi. 1866, p. 282, pl. 4. figs. 1-7.

Adults of both sexes of this remarkable and interesting Spider were contained in Mr. Melliss's St.-Helena collections.

Fam. EPEÏRIDES.

Genus TETRAGNATHA.

TETRAGNATHA PELUSIA.

Tetragnatha pelusia, Sav. Arachn. de l'Egypte, pl. 2. fig. 3.

Well-marked examples of this species were found in the two last-received collections from St. Helena.

Genus META.

META DIGNA.

Tetragnatha digna and *T. indigna*, Cambr. Spiders of St. Helena, Proc. Zool. Soc. 1869, pp. 535, 537, pl. xlii. figs. 3, 4.

Adult male, length from $2\frac{1}{2}$ to $3\frac{1}{2}$ lines.

In the former paper on St.-Helena Spiders a single immature male of *M. digna* was described as a distinct species, owing to a great dissimilarity in the pattern on the abdomen; the present collection contained several adult males and females, proving beyond a doubt that they are of one species only, the apparent difference in the pattern on the abdomen not holding constant in the different adult examples of the sexes.

The *legs* of the adult male are longer than those of the female, being nearly, if not quite, four times the length of the Spider.

The *palpi* are rather long and slender; the cubital joint is very short, and has at its fore extremity on the upperside a long, strong, tapering, nearly straight, black bristle directed forward, the radial being nearly four times as long, and increasing gradually in strength to its extremity, where it is furnished with a few long, strong, prominent black bristles and hairs.

The *digital* joint is rather small and of a narrow-oval form, its convex side being turned inwards. From its base springs a rather long, tapering, almost straight, and nearly perpendicular horn or apophysis, its extremity being bluntish-pointed and black; the length of this horn about equals half the length of the digital joint, but exceeds its breadth. The palpal organs are well developed and prominent, consisting of a somewhat oval, convex, corneous lobe, with a detached curved process at the base on the outer side, and an obtuse one at the extremity projecting forwards just beneath the fore extremity of the digital joint; and springing from it is a small curved sharp-pointed spine.

A remarkable similarity in the form and structure of the palpi and palpal organs exists between *M. digna* and *M. (Tetragnatha) decorata* (Bl.), figured, Linn. Soc. Journ. x. pl. 13. figs. 66, 67; but in other respects the species are totally distinct.

Fam. ULOBORIDES.

Genus ULOBORUS.

ULOBORUS WILLIAMSII.

Orithyia williamsii, Bl. Ann. Nat. Hist., Nov. 1858.

Adult females of this Spider were contained in Mr. Melliss's last two collections from St. Helena.

Fam. THOMISIDES.

Genus XYSTICUS (Koch).

XYSTICUS GRAMMICUS.

Xysticus grammicus, Koch, Die Arachn. Bd. iv. p. 57, tab. 124. fig. 285.

Adult males and numerous females were received from St. Helena; some of the latter sex were accompanied by their nests and egg-cocoons, which last were sewn up in a leaf whose edges were brought together, forming a neat little bag. The male is much smaller and darker-coloured than the female.

Fam. LYCOSIDES.

Genus LYCOSA.

LYCOSA (TROCHOSA) DOLOSA, sp. n.

Adult female, length $7\frac{1}{2}$ lines.

The *cephalothorax* of this fine species is broad-oval, truncate before, constricted laterally forwards; the caput is roundly convex, and the profile line from the thoracic junction to the middle row of eyes is rather arched; it is of a dark reddish yellow-brown colour, the caput being the darkest; from between the hinder pair of eyes three lines of pale hairs run backwards to the thoracic junction, the two lateral ones of these lines enclose a pointed oval space which is

longitudinally bisected by the third line; the normal grooves and indentations are well marked, and give the ordinary radiated appearance to the thorax.

The *eyes* are in the usual three rows; those (four in number) of the foremost row are minute and form a straight line very near to the insertion of the falces; those of the central pair of this row appeared to be rather smaller than the laterals; and the interval between them is less than that between each and the lateral on its side: those of the middle row are largest of the eight; they form a line rather less in length than that formed by those of the foremost row, and are separated from each other by an interval about equal to half of the diameter of one of them: those of the hinder row are removed behind the middle row about the space of the diameter of one of the latter, and form a line rather longer than either of the others; with the eyes of the middle row they form a quadrangular figure whose sides and front are equal in length, but its hinder side about one third longer.

Legs strong, moderately long, their relative length 4, 1, 2, 3; they are of a yellow-brown hue, but not of a uniform depth of colour; some portions, particularly the tibiæ, tarsi, and metatarsi of those of the first and second pairs, are much the darkest and red-tinged, some of the joints also showing faint indications of darker brown annulations: they are furnished with hairs and spines, those of the latter beneath the tibiæ and metatarsi of the two foremost pairs being most numerous, longest, and strongest.

The *palpi* are moderately long and strong, and of a dark reddish yellow-brown colour.

The *fulces* are long, strong, and massive, prominent near their base in front; their colour is deep red-brown, approaching to black, and they are furnished pretty thickly with hairs and bristles.

The *maxillæ* and *labium* are of normal form, similar to the falces in colour, though pale yellowish at their extremities, and furnished, especially at those points, with hairs and bristles.

Sternum oval, yellow, and clothed with a few longish bristly hairs.

Abdomen oval, projecting a little over the base of the cephalothorax, and clothed pretty thickly with hairs; its colour is pale yellow-brown, marked with black-brown, showing a pattern nearly resembling that of *Lycosa agretica* (Bl.); the normal elongate marking on the fore half of the upperside is large and bold, of a dark yellow-brown colour, edged with blackish; its hinder extremity is obtuse and sends forth a short line from each corner, as well as one from each side nearly halfway towards its fore extremity; and the sides are marked by oblique dark black-brown broken lines; the underside is of a uniform pale yellowish hue.

The spinners are short, those of the inferior pair being the strongest.

Two adult females and numerous young examples were contained in Mr. Melliss's St.-Helena collection.

Fam. SALTICIDES.

Genus SALTICUS, Bl. (ATTUS, Sim^s, &c.).

SALTICUS INEXCULTUS, sp. n.

Adult male, length $2\frac{3}{4}$ lines.

The *cephalothorax* of this species is massive and, looked at from above, of a short, broad, oval form; in profile the hinder slope is very abrupt and a little hollow or impressed, the ocular region sloping forwards and slightly prominent; it is of a deep brown colour, with a not very broad marginal band (running also round the front) of white squamose hairs; the upper surface of the caput is thickly clothed with brightish and rather coppery-yellow, short, adpressed, squamose hairs; and these are continued in a tapering form to the hinder slope, where they merge in a longitudinal central band of white hairs; the sides of the caput and thorax are thinly clothed with dull coppery-yellow hairs; and the upper surface, as also the ocular area and clypeus, is furnished with longish prominent bristles and strong hairs.

The *eyes* are normal both in respect of position and relative size; the two forming the third or hinder row are rather wider apart than the laterals of the first row, and the area enclosed by these four is about double as long in its transverse as in its longitudinal diameter; the exact position of the two minute eyes forming the middle row could not be ascertained, owing to their concealment by the hairs around them.

The *legs* are strong and moderately long; their relative length appeared to be 3, 1, 4, 2; they are of a dark brown colour (the femora of the first pair of a red hue), furnished with hairs, bristles, and spines, a few of the hairs being white and squamose; the tarsi of the second, third, and fourth pairs are of a pale yellowish colour, banded with brown; and each has a terminal tuft of hairs beneath the tarsal claw.

The *palpi* are short and rather slender, of a pale yellowish colour, except the posterior halves of the humeral and the digital joint, which are brown; they are furnished with hairs and bristles: numerous squamose white hairs are distributed over the upper surface and sides of the humeral and cubital joints, and a few on the radial; this last is about equal in length to the cubital joint, and its outer extremity is produced into a tapering, blackish, corneous, pointed apophysis. The digital joint is equal in length to the radial and cubital together, and has numerous whitish hairs at its extremity. The palpal organs are simple, not prominent nor highly developed; a slender filiform blackish spine issues from their base and curves round their inner margin to their extremity.

The *falces* are small, subconical, directed backwards, and of a deep black-brown colour.

The *maxillæ*, *labium*, and *sternum* are normal in form, and of a deep brown colour, the former tipped with a paler hue.

The *abdomen* is small, oval, thickly clothed with hairs of a yellowish grey, black, and coppery hue, forming a broadish roughly dentate